

fixedly connected to a first end of the outer tube 40, an inner tube 60 having a first end thereof retractably received in the outer tube 40 and a second contacting member 62 fixedly connected to a second end of the inner tube 60, and an adjusting means 50 disposed to a second end of the outer tube 40. The inner tube 60 has a toothed surface 61 defined in an upper surface thereof.

The adjusting means 50 includes a cover member 51 connected to the second end of the outer tube [60] 40 and including two sidewalls 510 and a top 511. The top 511 has an aperture 515 defined therethrough so that an actuating member 55 is movably inserted therein. The cover member 51 has an enlarged head portion 513 which is connected to the two sidewalls 510 by a divergent neck 512. The head portion 513 has two lugs 5130 formed to an underside thereof and two bosses 5120 extend inwardly and laterally from an inner periphery thereof. The second end of the outer tube 40 is received in the head portion 513 and has two dents 42 defined in an outer periphery thereof so that the two bosses 5120 are received in the two dents 42 and the second end of the outer tube 40 is securely received in the head portion 513 by connecting the two lugs 5130 by a bolt 514. Each of the two sidewalls 510 has an opening 5100 defined therethrough.

A handle 80 has two plates 81 extending therefrom which are inserted between the two sidewalls 510. Each of the plates 81 has a first hole 817, a second hole 811, a first slot 816 and a second slot 814 respectively defined therethrough. A first pawl member 52 and a second pawl member 53 are respectively and pivotally connected between the two plates 81 by respectively extending a first pin 810 and a second pin 812 through the first holes 817 and the second holes 811, wherein the first pin 810 also extends through the two openings 5100. Each of the first pawl member 52 and the second pawl member 53 has a transverse bar 521/532 extending laterally from a lower end thereof so that a connecting member 54 is connected therebetween which is pressed by the actuating member 55. Therefore, as described about the conventional crossbar device, when pressing the connecting member 54 by pulling the actuating member 55 will lower the respective lower ends of the second pawl member 53 and the first pawl member 52 to engage with the toothed surface 61 so as to move the inner tube 60 by the conventional way. An upper end of the second pawl member 53 has a notch 530 defined in an underside thereof so as to receive a third pin 813 therein which is movably received in the two first slots 816. The upper end of the second pawl member 53 further has a longitudinal recess 531 defined therein which has a bottom portion 5310 defining the longitudinal recess 531.

A pushing member 70 is disposed between the two plates 81 and movably between the first slots 816 and the second slots 814. An end of the pushing member 70 has the third pin 813 extending transversely therethrough and is engaged with the upper end of the second pawl member 53 by pressing on the bottom portion 5310 [530] defining the longitudinal recess 531. A fourth pin 815 extends transversely through the other end of the pushing member 70 and [in] is movably received in the two second slots 814.

Accordingly, when pushing the pushing member 70 downwardly which pushes the second pawl member 53 together with the first pawl member 52 downwardly with the third pin 813 and the fourth pin 815 moved downwardly within the first and the second slot 816, 814 so that the two

pawl members 52, 53 are pivoted to be disengaged from the toothed surface 61 of the inner tube 60.

The invention is not limited to the above embodiment but various [modification] modifications thereof may be made. It will be understood by those skilled in the art that various changes in form and detail may be made without departing from the scope and spirit of the present invention.

What is claimed is:

1. A crossbar device comprising an outer tube with a first contacting member fixedly connected to a first end of said outer tube, an inner tube having a first end thereof retractably received in said outer tube and a second contacting member fixedly connected to a second end of said inner tube, and an adjusting means disposed to a second end of said outer tube, said inner tube having a toothed surface defined in an upper surface thereof;

said adjusting means including a handle from which two plates extend and each of said plates having a first hole, a second hole, a first slot and a second slot respectively defined therethrough, a first pawl member and a second pawl member respectively and pivotally connected between said two plates by respectively extending a first pin and a second pin through said first holes and said second holes, each of said first pawl member and said second pawl member having a transverse bar extending laterally from a lower end thereof so that a connecting member is connected therebetween, a cover member connected to said second end of said outer tube and having an actuating member movably inserted therein so as to press said connecting member to lower said respective lower ends of said first pawl member and said second pawl member to engage with said toothed surface, and

a pushing member disposed between said two plates and [movably] movable between said first slots and said second slots, said pushing member having an end thereof engaged with an upper end of said second pawl member so that when pushing said pushing member downwardly, said second pawl member together with the first pawl member are pivoted to be disengaged from said toothed surface of said inner tube.

2. The crossbar device as claimed in claim 1, wherein said upper end of said second pawl member has a notch defined in an underside thereof so as to receive a third pin therein which extends through said pushing member and is received in said two first slots.

3. The crossbar device as claimed in claim 1, wherein said upper end of said second pawl member includes a longitudinal recess defined therein which has a bottom portion defining said longitudinal recess, and said pushing member contacts against said bottom portion.

4. The crossbar device as claimed in claim 1, wherein a fourth pin extends through said pushing member and is movably received between said two second slots.

5. The crossbar device as claimed in claim 1, wherein said cover member has an enlarged head portion which has two lugs formed to an underside thereof and two bosses extending inwardly and laterally from an inner periphery thereof, said second end of said outer tube having two dents defined in an outer periphery thereof so that said two bosses are received in said two dents and said second end of said outer tube is securely received in said head portion by connecting said two lugs by a bolt.

6. A crossbar device comprising an outer tube having a first end and a second end, an inner tube having a first end retractably received in the second end of said outer tube, and an adjusting means disposed to the second end of the outer tube, said inner tube having a toothed surface;

said adjusting means including a handle from which two plates extend, a first pawl member having a first end pivotally connected between said two plates and a second end, a second pawl member having a second end pivotally connected between said two plates and a second end, a connecting member being mounted between said two plates and configured to be operably connected to the second end of the first pawl member and the second end of the second pawl member, a cover member being provided adjacent to said the second end of the outer tube and having an actuating member movably inserted therein so as to press the connecting member to move the second end of the first pawl member and the second end of the second pawl member to engage with the toothed surface of the inner tube; and

means mounted between the two plates for disengaging the second end of the first pawl member and the second end of the second pawl member from the toothed surface of the inner tube when said disengaging means is manually actuated.

7. The crossbar device as claimed in claim 6, further comprising a first contacting member connected to the first end of the outer tube.

8. The crossbar device as claimed in claim 6, further comprising a second contacting member connected to the second end of the inner tube.

9. The crossbar device as claimed in claim 6, each said plate has a hole, a pin being extended through the holes of the plates and the first end of the first pawl member to thereby pivotally mount the first pawl member between the plates.

10. The crossbar device as claimed in claim 6, each said plate has a hole, a pin being extended through the holes of the plates and the first end of the second pawl member to thereby pivotally mount the second pawl member between the plates.

11. The crossbar device as claimed in claim 6, wherein the second end of the first pawl member has a first transverse bar extending laterally, the second end of the second pawl member having a second transverse bar extending laterally, and the connecting member being operably connected to the first transverse bar and the second transverse bar.

12. The crossbar device as claimed in claim 6, wherein each said plate has a first slot and a second slot, and wherein said engaging means is a pushing member disposed between said two plates and movable between the first slots and the second slots, said pushing member having an end engaged with the first end of the second pawl member so that when pushing the pushing member toward the toothed surface of the inner tube, the second pawl member together with the first pawl member are pivoted to be disengaged from the toothed surface of the inner tube.

13. The crossbar device as claimed in claim 12, wherein the first end of the second pawl member has a notch defined in an underside thereof so as to receive a pin therein which extends through said pushing member and is received in said two first slots.

14. The crossbar device as claimed in claim 13, wherein the first end of the second pawl member includes a longitudinal recess defined therein which has a bottom portion defining said longitudinal recess, and said pushing member contacts against said bottom portion.

15. The crossbar device as claimed in claim 13, further comprising a second pin extending through said pushing member and movably received between said two second slots.

16. The crossbar device as claimed in claim 6, wherein said cover member has an enlarged head portion which has two lugs formed to an underside thereof and two bosses extending inwardly and laterally from an inner periphery thereof, said second end of said outer tube having two dents defined in an outer periphery thereof so that said two bosses are received in said two dents and said second end of said outer tube is securely received in said head portion by connecting said two lugs by a bolt.